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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/539,151	06/16/2005	Ulrich Berens	VT/95-22814/A/PCT	2741	
	7590 03/01/200 LTY CHEMICALS CO	EXAMINER			
PATENT DEPA		NOLAN, JASON MICHAEL			
540 WHITE PL P O BOX 2005	· <del>-</del> ·	ART UNIT	PAPER NUMBER		
TARRYTOWN	I, NY 10591-9005	1626			
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS 03/01/2007			PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Applicati	on No	Applicant(s)				
		Applicati						
		10/539,1	51	BERENS ET AL.				
Offic	e Action Summary	Examine		Art Unit				
		Jason M.	Nolan, Ph.D.	1626				
	ILING DATE of this communi	cation appears on the	e cover sheet with the	e correspondence ad	idress			
Period for Reply		00 000 V 10 007 7		(A) AD TUUDTY (A	)			
WHICHEVER - Extensions of time after SIX (6) MON - If NO period for re - Failure to reply wi Any reply received	D STATUTORY PERIOD FOR IS LONGER, FROM THE MARKED BY THE BY THE MARKED BY THE BY THE BY THE MARKED BY THE BY THE BY THE BY THE BY THE BY THE B	AILING DATE OF The of 37 CFR 1.136(a). In no evunication. tutory period will apply and wwill, by statute, cause the approximation.	HIS COMMUNICATI ent, however, may a reply be ill expire SIX (6) MONTHS fr dication to become ABANDO	ON. Etimely filed om the mailing date of this concern (35 U.S.C. § 133).				
Status								
1)⊠ Respons	sive to communication(s) file	d on <i>22 December 2</i>	006					
·	, -	b)⊠ This action is r						
<i>'</i> —	is application is in condition	<i>'</i> —		prosecution as to the	e merits is			
•	n accordance with the practic	ce under <i>Ex parte Qu</i>	iayle, 1935 C.D. 11,	453 O.G. 213.				
Disposition of Cla	aims							
4) Claim(s)	1 and 3-36 is/are pending ir	the application.						
4a) Of th	e above claim(s) <u>1,3-17 and</u>	25-30 is/are withdra	wn from consideration	on.				
5)⊠ Claim(s) <u>35</u> is/are allowed.								
6)⊠ Claim(s)	18,20,23,24,32 and 36 is/ar	e rejected.						
7)⊠ Claim(s)	19,21,22,31,33 and 34 is/ar	e objected to.						
8) Claim(s)	are subject to restric	tion and/or election r	equirement.					
Application Pape	rs		,					
9)∐ The spec	cification is objected to by the	e Examiner.						
10)∐ The draw	ving(s) filed on is/are:	a) accepted or b	☐ objected to by th	e Examiner.				
Applicant	t may not request that any object	ction to the drawing(s)	be held in abeyance.	See 37 CFR 1.85(a).				
•	ment drawing sheet(s) including							
11)∐ The oath	or declaration is objected to	by the Examiner. N	ote the attached Offi	ice Action or form P	ΓΟ-152.			
Priority under 35	U.S.C. § 119		•					
12) Acknowle	edgment is made of a claim	for foreign priority un	der 35 U.S.C. § 119	(a)-(d) or (f).				
	) ☐ Some * c) ☐ None of:							
1. C	ertified copies of the priority	documents have bee	en received.					
2. C	ertified copies of the priority	documents have bee	en received in Applic	ation No				
<del></del>	opies of the certified copies			eived in this National	Stage			
•	oplication from the Internation	*						
* See the a	ttached detailed Office action	n for a list of the cert	ified copies not rece	ived.				
Attachment(s)	ones Cited (DTO 200)		A\	(DTO 442)				
	ences Cited (PTO-892) person's Patent Drawing Review (P	TO-948)	4) Interview Summ Paper No(s)/Mai					
3) 🔯 Information Disc	closure Statement(s) (PTO/SB/08) il Date <u>01/17/2006</u> .	•		al Patent Application				

Claims 1 & 3-36 are currently pending in the instant application. No amended or new claims have been presented.

Information Disclosure Statement

Applicants' information disclosure statement (IDS), filed on 01/17/2006 has been considered. Please refer to Applicants' copy of the 1449 submitted herein.

Response to Restriction

Applicants' election without traverse of **Group V, Claims 18-24 & 31-36** is acknowledged. Further, Examiner acknowledges Applicants' submission of a new Abstract. For this reason the objection to the specification is withdrawn. The lack of unity restriction requirement, 11/21/2006, has been amended to include the missing Group:

**Group VII: Claims 26-30**, drawn to processes for making and using a compound according to formulae II<sup>1</sup>, XII<sup>1</sup> or XIV<sup>1</sup>.

Examination of **Group V**, **Claims 18-24 & 31-36** follows herein and the remaining **Claims 1, 3-17 & 25-30** are withdrawn from further consideration as being non-elected inventions.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18 & 32 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites the language "reducing a compound of the formula II" and the scope of this term is unclear, such that it fails to define the metes and bounds of its limitation. Compounds according to formula II have the following functional groups that are susceptible to reduction: the amide carbonyl; the indolone carbonyl; and the indolone aromatic double bonds. It is only assumed that applicant intends to reduce the indolone carbonyl as depicted in Claim 19. A more descriptive term explaining the scope of the claim is required.

Claim 32 is rejected under 35 U.S.C. § 112, second paragraph as it recites the limitation "R<sup>5</sup>" for the definition of formula XIV<sup>5</sup>. There is insufficient antecedent basis for this limitation in the claim since it is not defined in claim 1 for formula II. Appropriate correction is required.

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## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Speeter, M. E. (US Patent 2,692,882; 10/26/1954). The following compounds read on the instant claim wherein  $\mathbf{n} = 1$ ;  $\mathbf{R}_1 = \text{substituted alkoxy}$ ;  $\mathbf{R2} = \text{hydrogen}$ ; and  $\mathbf{R3} \& \mathbf{R4} = \text{alkyl}$ , substituted alkyl, or together form an alkylene ring with the binding nitrogen.

Claim 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Brown *et al.*(Journal of Heterocyclic Chemistry 1969, 6(4), 539-43). The following compound reads on the instant claim wherein  $\mathbf{n} = 2$ ;  $\mathbf{R}_1 = \text{alkoxy}$ ;  $\mathbf{R2} = \text{hydrogen}$ ; and  $\mathbf{R3} \& \mathbf{R4} = \text{alkyl}$ .

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Claim 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Germain *et al.* (*Chimica Therapeutics* 1973, 8(6), 647-51). The following compounds read on the instant claim wherein  $\mathbf{n} = 1$ ;  $\mathbf{R}_1 = \text{alkoxy}$ ;  $\mathbf{R2} = \text{hydrogen or alkyl}$  (substituted or unsubstituted); and  $\mathbf{R3} \& \mathbf{R4} = \text{alkyl}$ .

Claim 23 is rejected under 35 U.S.C. 102(b) as being anticipated by Hoshino *et al.* (*Ann.* 1935, 520, 19-30). The following compounds read on the instant claim wherein  $\mathbf{n} = 0$  or 1;  $\mathbf{R}_1 = \mathbf{C}_2$ -alkoxy;  $\mathbf{R2} = \mathbf{hydrogen}$ ; and  $\mathbf{R3} \& \mathbf{R4} = \mathbf{alkyl}$ .

Claim 23 is rejected under 35 U.S.C. 102(b) as being anticipated by Julian *et al.* (*Journal of the American Chemical Society* 1948, 70, 174-9). The following compound reads on the instant claim wherein **n** = 0; **R2** = alkyl; and **R3 & R4** = alkyl that together form an alkylene ring with the binding nitrogen.

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Claim 24 is rejected under 35 U.S.C. 102(a) as being anticipated by Albers *et al.* (*Journal of Pharmacy and Pharmacology* **Sept. 2002**, 54(9), 1265-1270). The following process is described which reads on the instant claim wherein  $\mathbf{n} = 1$ ;  $\mathbf{R}_1 = \text{substituted}$  alkoxy;  $\mathbf{R}_2$  becomes substituted alkyl; and  $\mathbf{R}_3$  &  $\mathbf{R}_4 = \text{alkyl}$ . A strong base (NaH) and a substituted alkyl according to **Alk-L** are used.

Claim 36 is rejected under 35 U.S.C. 102(b) as being anticipated by Speeter, M. E. (US Patent 2,692,882; 10/26/1954) and Hoshino *et al.* (*Ann.* 1935, *520*, 19-30). The compounds shown above by Speeter anticipate formula XII<sup>1</sup> and the compounds shown above by Hoshino anticipate formula XIV<sup>1</sup>.

## Claim Objections

Claim 33 is objected to because of the following informalities: the term "by reduction of the compound of formula XX<sup>6</sup>" is unclear. Examiner suggests the amendment: "by reduction of the aldehyde carbonyl in the compound of formula XX<sup>6</sup>" in order to fully describe the invention. Appropriate correction is required.

Claims 19, 21 & 22 are objected to as being dependent upon a rejected base Claim 18, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 24, 31, 33 & 34 recite the term "or a method for the synthesis of a tryptamine derivative having pharmaceutically useful properties comprising said process." This term objected to as being redundant, i.e. not further limiting subject matter and not adding a patentable contribution to the claim. The processes are directed to tryptamine derivatives and whether or not those derivatives have pharmaceutically useful properties is an inherent property of each compound. Deletion of this term is suggested.

## Allowable Subject Matter

Claim 35 is allowed. The transformation of a compound according to formula XIV wherein  $\bf n=1$  and  $\bf R_1=$  halogen to a compound of formula  $XX^7$  is free of the prior art.

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## Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Nolan, Ph.D. whose telephone number is (571) 272-4356 and electronic mail is Jason.Nolan@uspto.gov. The examiner can normally be reached on Mon - Fri (9:00 - 5:30PM). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on (571) 272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason M. Nolan, Ph.D.

Examiner Art Unit 1626

PATENT EXAMINER

Joseph K. McKane

Supervisory Patent Examiner

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Date: February 21, 2007